

## CLAIMS

What is claimed is:

1. A micro-filter for filtering blood cells, comprising:  
a plurality of filtering channel structures, each having a first through hole and a  
5 first concave portion connected to each other, wherein the first concave portion  
defines two first channel portions opposite each other; and  
a plurality of through channel structures respectively connected to the filtering  
channel structures, wherein each defines a second through hole connected to the first  
concave portion.  
10 2. The micro-filter as claimed in claim 1, wherein the first channel portion has a  
plurality of channels and openings.  
3. The micro-filter as claimed in claim 1, wherein each of the through channel  
structures defines a second channel portion thereunder, and the second channel  
portion includes a plurality of channels and openings.  
15 4. The micro-filter as claimed in claim 1, wherein the filtering channel structures  
are respectively attached to the through channel structures by an anode joint.  
5. The micro-filter as claimed in claim 1, wherein the filtering channel structures  
and the through channel structures are made of a silicon wafer.  
6. The micro-filter as claimed in claim 1, wherein the filtering channel structures  
20 are respectively attached to the through channel structures in an array.  
7. A micro-filter for filtering blood cells, comprising:  
a plurality of filtering channel structures, each having a first through hole and a  
first concave portion connected to each other, wherein the first concave portion  
defines two first channel portions opposite each other, and each first channel portion  
25 includes a plurality of channels and openings; and  
a plurality of through channel structures respectively connecting to the filtering  
channel structures, wherein each defines a second through hole and a second concave  
portion connected to each other, the second through hole connects to the first  
concave portion, and the second concave portion defines two second channel portions

opposite each other, each of the second channel portions having a plurality of channels and openings; and

a base structure connected to a bottom of the through channel structures and having a plurality of through hole therein to strengthen the micro-filter.